

WEST Search History

DATE: Wednesday, May 28, 2003

Set Name Query
side by side

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result set

DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ

L7	differential scanning calorimetry and L6	4	L7
L6	L5 and polymer\$8	50	L6
L5	L4 and starch	53	L5
L4	L3 and synthase	59	L4
L3	L1 and viscosity	820	L3

DB=USPT; PLUR=YES; OP=ADJ

L2	L1 and viscosity onset	1	L2
L1	((800/284)!.CCLS. (536/45 536/102 536/123.1 536/124 536/127 536/128)!.CCLS.)	2749	L1

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 16:20:38 ON 28 MAY 2003)

FILE 'CAPLUS, USPATFULL, MEDLINE' ENTERED AT 16:21:12 ON 28 MAY 2003

L1	277373 S STARCH
L2	16248 S L1 AND TRANSFORMED
L3	3 S L2 AND VISCOSITY ONSET TEMPERATURE
L4	3551 S L2 AND VISCOSITY
L5	1902 S L4 AND POTATO
L6	465 S L5 AND (SSII OR SSIII OR SYNTHASE)
L7	2 S L6 AND ENDOTHERM

L6 ANSWER 1 OF 465 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1999:811367 CAPLUS

DOCUMENT NUMBER: 132:31779

TITLE: Improvements in or relating to plants and plant
starch products resulting from transformation
with antisense **starch synthase**
constructs

INVENTOR(S): Edwards, Elizabeth Anne; Jobling, Stephen Alan;
Martin, Catherine Rosemary; Schwall, Gerhard Peter;
Smith, Alison Mary; Westcott, Roger John

PATENT ASSIGNEE(S): National Starch and Chemical Investment Holding
Corporation, USA

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9966050	A1	19991223	WO 1999-GB1902	19990615
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2331300	AA	19991223	CA 1999-2331300	19990615
AU 9943802	A1	20000105	AU 1999-43802	19990615
EP 1092033	A1	20010418	EP 1999-926617	19990615
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
JP 2002518015	T2	20020625	JP 2000-554859	19990615
PRIORITY APPLN. INFO.:			EP 1998-304716 A	19980615
			WO 1999-GB1902 W	19990615

AB A method for modifying plants by manipulating the activity of a combination of plant enzymes having **starch synthase** activity, in particular **starch synthase II** (**SSII**) and **starch synthase III** (**SSIII**)). Modified plants, their use as food products and **starch**, in particular obtained from a modified **potato** plant, having novel properties and uses thereof are also disclosed. **Starch** extd. from **potato** plants **transformed** by introduction of and **SSII/SSIII** combination operably linked in the antisense orientation to a suitable promoter, has a **viscosity** onset temp. as detd. by viscoamylograph, which is significantly reduced compared to the effects predicted by reducing the 2 isoforms individually or in unmodified plants. The modified **starch** may have uses in food processing and other applications, such as in the paper, textiles, and adhesives industries (no data).

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 465 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:592269 CAPLUS

DOCUMENT NUMBER: 127:187509

TITLE: Cloning and expression of soluble **starch synthase** of **potato** tubers and use of the enzyme for producing modified **starch**

INVENTOR(S): Smith, Alison Mary; Marshall, Jacqueline; Edwards, Elizabeth Ann; Martin, Catherine Rosemary
 PATENT ASSIGNEE(S): National Starch and Chemical Investment Holding Corporation, USA
 SOURCE: Eur. Pat. Appl., 39 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 779363	A2	19970618	EP 1996-309004	19961211
EP 779363	A3	19980520		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AU 9674268	A1	19970703	AU 1996-74268	19961211
AU 723475	B2	20000824		

PRIORITY APPLN. INFO.: GB 1995-25353 A 19951212

AB The cDNA encoding a sol. **starch synthase** was isolated from **potato** (*Solanum tuberosa* cultivar Desiree) tubers and its amino acid sequence deduced. The purified enzyme exhibits 100-140 kDa on SDS-PAGE. A transgenic **potato** plant expressing the antisense sequence of sol. **starch synthase** produced **starch** having a **viscosity** onset temp., as detd. by differential scanning calorimetry, lowered by at .gtoreq.5.degree.C compared to **starch** extd. from the non-transformed plants. Reduced sol. **starch synthase** activity affected the shape of **starch** granules, but had little effects on the amylose content.

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